# Year Two Annual Report Summary 

 ADVANCE Institutional Transformation at Kansas State UniversityYear 2: October 1, 2004-September 30, 2005
Principal Investigator: Dyer, Ruth

## Activities and Findings

## Research and Education Activities (Year One 4th Quarter and Year Two Activities to Date):

Our ADVANCE Institutional Transformation Project was designed to address three barriers to women's advancement in science, engineering, and mathematics (SEM) at Kansas State University (K-State): lack of effective recruitment, exclusion from networks, and subtle biases working against them. We had four goals at the inception of the project. These were:

1) To institute changes in existing departmental policies, procedures and practices, and develop new ones as needed to foster a gender-equitable climate within partner departments;
2) To expand and enhance departmental recruitment practices to attract more women applicants and ensure that candidates are not subject to subtle bias in the search and hiring process;
3) To implement effective programs that foster the careers of women faculty and encourage their retention through tenure and promotion; and
4) To propagate the successes achieved in partner departments to all SEM departments.

We report here on project activities occurring since our last annual report. This covers the period July 1, 2004 through June 30, 2005, which represents the last quarter of project year one and the first three quarters of project year two. We have included in parentheses after each activity description the goal it was intended to address.

1. The Executive Committee met monthly to discuss the progress and policies of the ADVANCE program. A new Dean of Agriculture, Dr. Fred Cholick, joined the project as a Senior Personnel and Executive Committee member in August 2004. PIs Montelone and Dyer met with him to describe program goals and initiatives and to address questions about the operation of the project. (Goals 1-4)
2. The Steering Committee met monthly to coordinate and guide the direction of the program initiatives. In July 2004, the Steering Committee developed a reporting form to gather information about activities that occurred during the visits associated with the ADVANCE Distinguished Lecture Series. This committee also reviewed the Career Advancement Program (CAP) proposals and made funding recommendations to the PIs. (Goals 1-4)
3. PIs Montelone and Dyer met periodically with staff members from the K-State Office of Planning and Analysis to discuss data collection for the majority of the 12 NSF Indicators for year one and year two of the grant period. The PIs reviewed the data for discrepancies and refined the parameters of the collection process. (Goals 1-3 and the NSF Indicator data collection process)
4. PIs Montelone and Dyer and Project Coordinator Wood met with staff members of the Office of Educational Innovation and Advancement (OEIE) periodically to discuss evaluation methods and procedures. OEIE developed, implemented, and summarized post-surveys for the Equity Action Workshop on Recruitment \& Retention and one of the Internal Advisory Board meetings. They also evaluated the Parallel-Paths program and conducted individual interviews with ADVANCE Distinguished Lecture Series participants. They reviewed and analyzed the NSF Indicator data for the first two years of the project and prepared final reports for each year. They are planning to conduct focus groups in Fall 2005 to assess the website revisions and the department policy revisions.
(Assessment)
5. Project Coordinator Wood requested information from departments on start-up packages (NSF Indicator) using the template created by the Steering Committee. (Goals 1-3 and the NSF Indicator data collection process)
6. PIs Montelone and Dyer initiated discussions with the new Women in Engineering and Science Program (WESP) Director, Dr. Kimberly Douglas, with regard to WESP's role in implementation of the Academic Career Exploration (ACE) Program. ACE is a mentoring program for undergraduate women in science, engineering, and mathematics, intended specifically to encourage women of color to consider careers in academia. We have gathered data on the number of eligible women students of color in each of the SEM colleges. An organizational meeting with directors of diversity programs in three of our four partner colleges was held and a focus group with students was conducted, both in Spring 2005. (Goal 2)
7. Created the Special Assistant to the Provost position to provide a semester-long central administrative experience for faculty members. Four individuals have been selected for this position to date, one white female, one minority male, and two white males. The terms of appointment have been for Spring, Summer, and Fall 2005, and Spring 2006. Another call for nominations and applications will be issued in Spring 2006. Funding for this position is provided through grant indirect cost return. (Goal 3)
8. Project Coordinator Wood hired two graduate research assistants, an undergraduate office assistant, and a web designer to support project activities. (Goals 1-3)
9. Graduate research assistant Sankaran met with PIs to discuss the data collected for analysis of office and research space. He collected and analyzed the data and prepared a report on this NSF Indicator. (Goals 123 and the NSF Indicator data collection process)
10. The new guidelines and reporting forms for all K-State ADVANCE initiatives were added to the K-State ADVANCE website. The site was officially launched in August 2004. (Goals 1-4)
11. An ongoing effort has been the creation of a Work/Life website, intended as a reference tool for current and potential employees to learn about the Manhattan, KS community and important campus and community resources. This project was described in our proposal as the Women's Resource Website, but the name of the website was changed to reflect its utility to both men and women at K-State. (www.ksu.edu/worklife) The site was officially launched in May 2005. (Goals 2-3)
12. Created a brochure and poster to summarize the project initiatives and their successes to date. (Goal 4)
13. Calls for proposals were issued for the ADVANCE Distinguished Lecture Series in Fall 2004 and in Spring 2005. We also have issued another call with applications due in September 2005. The outcomes of seminars that have occurred to date are reported in the Findings section. (Goal 3)
14. Two calls for proposals for the Career Advancement Program (CAP) for tenured women faculty members in SEM departments were issued and seven awards were made. (Goal 3)
15. All four participating colleges continued to conduct specific programs to benefit or enhance the numbers of SEM women faculty in their colleges.

- Agriculture sponsored a second round of small (ca. \$1200) Professional Development Awards. In this reporting period, 10 of these awards were made for travel, visits to collaborators, and conference attendance. (Goal 3)
- Arts \& Sciences was not satisfied with the response to the Administrative Shadowing Program and changed the name of the program to Administrative Leadership Program. The College initiated a new program called the Career Enhancement Opportunities Program, and made 10 awards in the first round and 13 in the second round of this reporting period. (Goal 3)
- Engineering conducted two programs; one focused on recruitment and the other on retention and professional advancement. Recruiting to Expand Applicant Pools (REAP) supports department heads and/or senior faculty on recruiting trips to sites likely to have large numbers of eligible women faculty candidates. Chemical Engineering and Electrical and Computer Engineering received REAP funding and made recruiting visits in this reporting period. (Goal 2)
- The Research Enhancement Visits (REV) program provided travel funds to tenure-track women faculty members to allow them to visit national laboratories or travel to collaborate with colleagues elsewhere. In this reporting period, nine awards were made to six faculty members. (Goal 3)
- Veterinary Medicine used its funding to create a group mentoring program, Parallel Paths, open to both men and women faculty members. Two groups of 9-10 faculty members each, consisting of both tenure-track and tenured faculty members, were formed, with three senior faculty mentors facilitating each group. Each group met monthly over dinner and discussed issues pertaining to career advancement. Group members were also eligible for small research enhancement grants. They created a professional development seminar series and solicited corporate funds to create additional teaching awards in the college. Assessment of the program was conducted and results are reported in the Finding section of this report. (Goal 3)

16. Partner departments conducted review and revision of department policies (tenure and promotion and other internal review documents) and worked on revision of their websites. (Goals 1, 2)
17. PI Montelone spoke about project initiatives at the Clark Atlanta University conference of representatives from HBCUs in August 2004 and at a workshop held at the University at Buffalo in September 2004 (Dissemination).
18. A joint Steering Committee/Partner Department Head meeting was held in October 2004. The partner departments summarized the progress they made on the ADVANCE project initiatives over the first project year. Partner departments submitted written reports to the ADVANCE Office in October 2004 and April 2005. Two new partner department heads, both women, joined the project, one in Fall 2004 and the other in Spring 2005. (Goal 1)
19. Held Equity Action Workshop in October 2004, with Dr. Cynthia Burack, "Toward Gender Equity in Website Design". The purpose of the workshop was to share information about the importance of using inclusive language and images in websites. Dr. Burack also presented a lecture entitled "Who Are We? Professional Identity and Resistance to Diversity" as part of the Vice Provost for Academic Services and Technology Lecture Series in Emerging Technology. Dr. Burack met with representatives from each of the six partner departments to review the changes they had made to their department websites and to make suggestions for additional changes. She met with the Executive and Steering Committee members over lunch. In June 2005, she began to conduct the final website evaluations for the six partner departments. (Goals 1, 2)
20. Hosted Dr. Geri Richmond, University of Oregon, as part of her visit to campus in October 2004. She gave the King Lecture in Chemistry, which was co-sponsored by Chemistry, ADVANCE and WESP, met with a group of undergraduate and graduate women students, and had dinner with members of the ADVANCE Executive and Steering Committees. (Goal 3)
21. Project Coordinator Wood met with the business officers from the four partner college and Sponsored Projects Accounting in November 2004 to answer questions about the ADVANCE financial process.
22. PIs Dyer and King attended the December 2004 NSF ADVANCE Engineering Workshop in Washington, DC, and participated on a panel to share information on how ADVANCE Institutional Transformational awards are changing engineering. (Dissemination)
23. Project Coordinator Wood met with the business officers from the partner departments and Sponsored Projects Accounting in January 2005 to answer questions about the ADVANCE financial process. She also attended the new Financial Information System session to learn about the new university accounting system that will take effect July 1, 2005.
24. An Internal Advisory Board meeting was held in January 2005, at which partner department heads disseminated information about their initiatives. The PIs gave an overview of the ADVANCE program, the charge to the Internal Advisory Board, and distributed handouts describing project initiatives. (Goal 4)
25. The Executive Committee and six Partner Department Heads met in February 2005 and discussed mechanisms for encouraging use of the Career MAPS template. An overview of the Career MAPS was given to the Internal Advisory Board in May 2005. The College of Veterinary ADVANCE Parallel Paths program is planning to make Career MAPS a component of the mentoring groups’ activities. (Goals 1, 3)
26. The College of Engineering used ADVANCE funds to partially support a series of diversity training workshops facilitated by Dr. Joann Moody in March 2005 for faculty and staff members. She met with members of each department in the college and with the President's Commission on Multicultural Affairs. (Goals 2-3)
27. Held Equity Action Workshop in March 2005 with Dr. Myra Gordon, Associate Provost, Diversity and Dual Career Development, the PIs, and two partner department heads presenting. The agenda focused on strategies to deal with issues involved in retaining and recruiting women, innovative approaches to recruiting, developing an action plan for implementation. The workshop was open to and attended by science, engineering, and mathematics department heads. (Goal 2)
28. PI Montelone presented a paper, coauthored by PI Dyer, at the Women in Engineering Programs and Advocates Network (WEPAN) National Meeting in April 2005. (Dissemination)
29. Project Coordinator Wood compiled dual career policies and initiatives from other ADVANCE institutions for discussion at the May 2005 Internal Advisory Board meeting. She also will be collecting faculty leave policies for discussion at an upcoming September 2005 Internal Advisory Board meeting.
30. A second Internal Advisory Board meeting occurred in May 2005, during which science, engineering, and mathematics (SEM) department heads broke out into groups and discussed which ADVANCE initiatives that have
been undertaken by the partner departments would like to be undertaken by other SEM departments. Another topic of discussion focused on what internal policies should be created or modified to better accommodate dual career issues. (Goals 2-4)
31. PI Montelone and OEIE staff members O’Dell and Conner attended the ADVANCE PI Meeting in Arlington, VA in May 2005. PI Montelone co-chaired one of the sessions and made presentations as a panel member at two additional sessions. (Dissemination)
32. Nominated one woman faculty member and two women administrators to attend the UMKC ADVANCE Leadership Institute to be held in October 2005 and March 2006. (Goal 3)

## Findings:

We report here the findings available to date from our project activities; our project has just completed the third quarter of our second year. We are reporting on recruiting success of women faculty and administrators, the status of the Career MAPS initiative, the implementation and early outcomes of the ADVANCE Distinguished Lecture Series, the assessment results from our Equity Action Workshop on Recruiting, the discussion topics and responses from the second Internal Advisory Board meeting, the development of the Career Advancement Program, the experience of one individual in the Administrative Leadership Program, the outcomes of the College of Engineering Recruiting to Expand Applicant Pools initiative, and the progress of the Parallel Paths program.

## Recruitment of SEM Women into Faculty and Administrative Ranks

Our ADVANCE program has illuminated many of the issues facing women faculty in SEM disciplines, and in response, a number of our deans and department heads have become very strong advocates for increasing the representation of women and have provided exceptional leadership in the recruitment, retention, and advancement of women within their units.

We are pleased to report the following successes in recruiting, promoting, and advancing SEM women:

- Eleven women faculty members hired in nine SEM departments in the last year
- The partner of a current woman faculty member also was hired into a tenure-track position and the spouse of a newly recruited woman was hired into a tenure-track position
- Six women tenured in six SEM departments
- Six women promoted to full professor in four SEM departments. Three of the four departments had no women full professors prior to this year
- Two women department heads hired in partner departments
- One woman mathematician hired as Director of the Multicultural Engineering Program
- One woman scientist hired as Associate Dean in the College of Arts and Sciences
- One woman engineer promoted to Associate Provost


## Career MAPS

This initiative encountered some unexpected resistance from the partner department heads with regard to its implementation. They expressed concerns that included whether the Career MAPS would be viewed as a contract that could impact the tenure or promotion process, the differences between Career MAPS and annual work plans that faculty members already submit, and ensuring that the Career MAPS are consistent with existing stipulations in the departmental tenure and promotion documents. As a result, only one partner department used this tool to create a plan for the one untenured woman faculty member in the unit. The Executive Committee decided to meet with the partner department heads to allow them to voice their concerns and to develop strategies that might prove more effective. As part of that meeting, two of the PIs participated in a role-play in front of the rest of the group to illustrate how one of these plans might be developed. The group had a lively discussion and became engaged in construction of the example Career MAP. The partner department heads began to describe how they could implement these within their own units.

The most positive response to date has occurred in the College of Veterinary Medicine (CVM) and it is very exciting to observe the results. Dr. Bonnie Rush, a member of our Steering Committee, shared the Career MAPS template with her small peer-mentoring group of new faculty members in Clinical Sciences. This group included three new untenured faculty members, both men and women. They were very enthusiastic about developing their own MAPS and have discussed them at subsequent meetings. In addition, she shared the template with the Parallel Paths small mentoring group, of which she is a member. Some of the members of that group visited individually with her and expressed interest in this professional development tool, with the result that this topic was put on the agenda for the next meeting
of the Parallel Paths group. At that meeting, one of the most enthusiastic supporters who emerged was a senior male faculty member close to retirement and highly respected by the faculty members in the college. He was so taken with the power of this tool, that he announced his intention to create his own MAP. This type of advocacy is essential for the institutional transformation we are seeking.

What we have learned from this experience in the CVM is that it appears that a peer mentoring approach to the implementation of this tool may be more effective than a department head/junior faculty implementation model. We are very encouraged by these results and plan to work with the Executive Committee to encourage adoption of this model in all four colleges.

## ADVANCE Distinguished Lecture Series

We have received a total of twenty seven applications to date to host speakers, all of which have been approved. In the first year of the program, there were 23 eligible women faculty members in 15 of the 27 SEM departments. Fourteen women (61\%) from ten departments submitted applications. This group consisted of two faculty members of Asian origin, two Hispanics, and the rest White. In the second year of the program, there were 24 eligible women faculty in 12 SEM departments, of whom thirteen (54\%) have submitted applications. These applicants represented ten SEM departments; three are Asian, two are Hispanic, and the rest are White.

Sixteen of the lectures have taken place to date. Of the speakers who have visited our campus to date, the gender breakdown is eleven men and five women. The majority of these speakers are from large research universities, including University of California at Berkeley, the University of Georgia, the University of Maryland, and the University of Michigan. Other speakers come from a research hospital, a federal research laboratory, a consulting engineering firm, and a professional organization. Most of these individuals are full professors, some of whom hold named chairs or administrative appointments. A list of completed and upcoming lectures is available on the K-State ADVANCE website.

## Reported Interaction with Speakers and Benefits to Host

Each faculty member who hosts a speaker provides a written report to the ADVANCE program that describes the types of interactions that occurred during the visit and planned future interactions. We have received nine written reports to date, along with verbal communication about the success of the visits from the hosts' department heads and deans. These reports are uniformly positive and identify an extensive range of activities in which the speakers have participated. Specifically, these include discussions of current research, suggestions for future research projects, review of the host faculty member's curriculum vitae and grant proposals, and demonstration of research techniques.

One host faculty member reported that the seminar and the speaker's discussions with her colleagues excited them about the potential of her research specialty and has resulted in the formation of a number of new collaborations for her with her on-campus colleagues. Another host indicated that her speaker, a clinician, led rounds describing unusual cases for a number of veterinary medical residents. Two women reported hands-on interaction with their guests in learning new techniques, one in the area of teaching and the other in the area of research. All of the hosts noted that the speakers met with students in the department, as well as with students working on the host's research projects.

In addition to benefiting from the on-campus visit of the speaker, host women faculty members also are continuing to interact with their invited guests in a variety of ways. These include planning for future meetings and collaborations, writing joint grant proposals, preparing and submitting publications, and arranging reciprocal visits to the speaker's institution. Some of the speakers also have provided letters of support for grant proposals, nominated the host women to serve on committees of national professional organizations, introduced them to other professional colleagues, and recommended graduate students to work with the host woman faculty member at K-State. One of the speakers plans to return to K-State to present a more extensive hands-on clinic for students. Two of the women mention plans to meet with their speakers at upcoming national professional conferences. Introductions by her guest speaker to other senior leaders in her field at these conferences will be potentially catalytic for a rapid expansion of the professional network of these junior faculty women.

## Interviews with Host Faculty Members

We also obtained feedback through interviews conducted by OEIE with ten of the host faculty members to date. In the interviews, the host women were asked to describe the activities their speakers engaged in on campus, and identify which were most and least beneficial to them, and the reactions of their colleagues.

In describing which of these activities was the most beneficial, the respondents most commonly described the one-onone interaction with the speaker ( 6 respondents). They also described the seminar ( 5 respondents) and meetings between the speaker and the host's colleagues ( 3 respondents) as particularly beneficial. The most well-received activities included the speaker's seminar ( 6 respondents) and the general interaction with the speaker ( 2 respondents). The least beneficial component of the event was not having enough one-on-one interaction between the host and the speaker (2 respondents). No one described activities that were not well-received.
The hosts described a variety of potential benefits to their careers. These included gaining experience that will be beneficial in teaching, increasing networks within professional organizations, obtaining experience in hosting a speaker, and meeting renowned researchers who might include them in future projects ( 2 respondents each).
In addition to the general benefits, the hosts shared specific ways in which the experience could benefit their careers. For example, all ten women indicated that they planned to continue interacting with the speaker. Further, five respondents described other professional connections they have made as a result of the program, including influential individuals in professional organizations, companies, and other universities. Also, two women indicated they received generally helpful input on their research from the speakers, while another two said that they learned of literature references that will be useful in their research.

We plan to continue to collect follow-up information from the host faculty members to assess the longer-term impact of this program. Specifically, we will be following up with the women each year until their tenure decision to determine the impact that hosting these speakers has had on their careers, whether the speakers are serving as outside references as part of their tenure package, and what additional interactions with their speakers have taken place. We also plan to request information from the speakers as to the benefits they have derived from participation in this program and any suggestions they may have for future program directions.

## Equity Action Workshops

One Equity Action Workshop was held in Fall 2004 and another in Spring 2005. Our consultants Dr. Cynthia Burack and Dr. Myra Gordon led these, respectively.
In response to the first workshop on website design led by Dr. Burack in March 2004, our partner departments began making revisions to their department websites. One of the department heads described at the first Internal Advisory Board meeting the process he used to ensure that faculty web pages of male and female faculty were of similar length and that the site included images of both men and women. Another department head specified the process she used to incorporate images of diverse students and faculty, including the fact that she selected photographs showing women in leadership roles. This department hired a professional photographer and a site designer to assist with the revisions.
Dr. Burack provided preliminary written evaluations to two of our partner departments who requested early feedback. In these evaluations she offered suggestions for making the websites more appealing to a diverse audience. In general, the first set of revisions improved the websites. In Fall 2004 Dr. Burack returned to K-State and provided a repeat offering of the workshop on website design for a broader audience. She also met with representatives from each of our partner departments to review and discuss their progress on revisions. She is currently preparing complete evaluations for all six partner department websites.
The workshop on recruitment led by Dr. Gordon was open to all SEM faculty members, department heads and administrators. Our evaluation team developed a post-survey using a 5-item Likert scale that was completed on line by the participants of the workshop. The responses to survey questions were analyzed on the basis of the sex of the respondents.

Respondents were asked to rate individual sessions at the workshop and the workshop as a whole, to rank the usefulness of four workshop activities (recruitment strategies, retention strategies, innovative approaches to recruiting, and action plan development), to indicate their gender, academic rank, the number of faculty search and Promotion and Tenure committees on which they have served, and to share additional comments about the workshop program. Of the 18 workshop attendees, 14 returned workshop assessment forms for a $77.8 \%$ response rate. Among those who returned the workshop evaluation form, eight (57.1\%) were men and six (42.9\%) were women. Nine (64.3\%) respondents were professors, one (7.1\%) was an associate professor, and four (28.6\%) were assistant professors. Respondents reported serving on an average of 2.23 ( $\mathrm{SD}=1.92$ ) faculty search committees, and $1.83(\mathrm{SD}=2.48)$ Promotion and Tenure committees in the past five years.
Respondents expressed the highest level of agreement on average with the statement "The workshop session on 'Novel Recruiting' provided me with new information," ( $M=4.43$ ) and the lowest level of agreement with the statement, "In
today's workshop, I learned about retention strategies that my department can specifically use to retain women" ( $\mathrm{M}=2.54$ ). Due to lack of time during the workshop, the topic of retention was not explicitly addressed. The average rating of the workshop as a whole was above midpoint on the rating scale $(\mathrm{M}=3.64)$.

Respondents were satisfied with the workshop sessions regarding strategies to recruit women SEM faculty. However, they were less satisfied that the workshop did not address the retention of women SEM faculty in great detail. Further, attendance at the final workshop session (action plan development) was low and the session did not progress as originally planned due to earlier sessions running behind schedule. To address these concerns, we plan to host another short program or workshop to specifically address retention strategies and action plan development.

## Policy Review and Revision

The six partner departments continued their internal reviews and revisions of their policies and procedures documents relating to annual evaluation, recruitment, and tenure and promotion. As these revisions were completed, the old and new versions of the documents were submitted to OEIE for comparison. They are in the process of carrying out this analysis. One department head worked with her faculty members to update their recruitment literature and to create a department newsletter that is distributed to alumni/ae, other engineering departments, and prospective faculty members.

## Internal Advisory Board

The second meeting of the IAB was held in May 2005. A total of 22 science, engineering, and mathematics (SEM) department heads attended the meeting.

The desired outcomes were (1) Create stronger sense of ownership on the part of the IAB members in the ADVANCE project, (2) Obtain advice and feedback from IAB members to enhance and expand the ADVANCE project, (3) Enable IAB members to implement initiatives within their own departments by providing resources and assistance, and (4) To take next steps toward the institutional transformation that the ADVANCE project seeks to achieve.

## Partner Department Responses

In general, the partner department representatives feel that they have adequate resources to pursue the initiatives they would like to implement.
Partner department heads believe that ADVANCE can increase program sustainability by continuing to host meetings and keeping faculty and administrators informed of progress resulting from the ADVANCE initiative.

To foster greater participation in the ADVANCE program on the part of IAB members, the partner department respondents felt that it was important to keep encouraging the other SEM departments to participate, but to understand that "change may come slower in some camps than others." In describing ideas shared at the meeting that would most benefit their department, one department head indicated that his or her department would benefit in terms of MAPS implementation, while the other indicated "Recruitment Website review."
Finally, one partner department head indicated that a challenge for the ADVANCE program is "Culture change in a largely male environment-must be careful to implement some programs across all faculty, women don't like to be singled out. Manhattan is a challenge because of the limitations of jobs and variety."

## Other SEM Department Responses

The non-partner department respondents indicated that as a result of attending the IAB meeting, they would like to improve their websites, and pursue initiatives such as Career MAPS and CAP. In terms of resources to pursue these initiatives, they indicated they need time, money, and someone to conduct an external review of their website.

The non-partner SEM department respondents believe that ADVANCE can increase program sustainability by continuing to expand to non-partner departments, sharing success stories resulting from the ADVANCE program using electronic mail, addressing the dual career issue, and bringing women positively affected by ADVANCE together to network.

In terms of suggestions for addressing the dual career issue at K-State, respondents noted that central university and dean's office funding could be applied to help departments fund trailing spouses. Other suggestions included hiring relocation specialists to help trailing spouses locate job opportunities in the community, applying internal funds to dual career positions, and addressing the general faculty concern that dual career funding can harm departmental growth.

Non-partner department respondents offered few suggestions to foster greater participation on the part of IAB members in the ADVANCE program, however one suggestion was to "Give us a mandate, then allow us to meet on our own, then take action on the suggestions from the IAB." In describing ideas shared at the meeting that would most benefit their department, the non-partner SEM department heads reiterated that Career MAPS, CAP, and addressing the dual career situation at K-State would be beneficial. Another respondent noted that "The biggest benefit will come from the enhanced careers of the women in the department impacted by the program."

Other comments shared by non-partner SEM department heads were positive statements regarding the meeting ("The meeting was very useful. Thanks for coordinating and presenting it") and the attitude of faculty in regard to ADVANCE ("There seems to be growing momentum in our college").

## Career Advancement Program

The first call for proposals for the Career Advancement Program (CAP) resulted in five applications. These were evaluated by the Steering Committee and three were chosen for funding. The three successful applications proposed strong mentoring relationships with experts in the applicants’ disciplines who could provide professional guidance and advice in their research areas. All three awardees identified detailed research activities that would lead to demonstrable professional advancement. These awards were made in September to begin October 1, 2004. Reports are due on October 1, 2005. Thus, we do not yet have any specific findings to report on the results of these awards.

The second call for proposals in Spring 2005 for this program for awards beginning in October 1, 2005 resulted in six proposals, three of which were funded. One of the proposals was a resubmission, referred to above. Another was a reapplication for continued funding from one of the Year One awardees. This application was declined because the Steering Committee did not believe that the proposal as written would provide the applicant with additional mentoring or research benefits, as it seemed to only be a continuation of her current activities. The other four proposals were from new applicants. The other two funded applicants proposed mentoring relationships and research activities that would allow them to expand their research programs while gaining administrative experience. We provided written reviews to all six applicants, and we offered to meet with the applicants whose proposals were not funded and discuss strategies that they could use to enhance their proposal for a resubmission at a later date

## Administrative Leadership Program

One award was made in the College of Arts and Sciences Administrative Leadership Program to an Associate Professor. She worked with the female department head of another SEM department during the Spring 2005 semester. She attended the July 2004 University of Washington's ADVANCE Leadership Workshop for Department Chairs and Emerging Leaders and another professional meeting intended to strengthen leadership in programs in her discipline. She has taken the lead in K-State's assessment of student learning for her department. She benefited by interacting with a number of leaders both within her own discipline and from other SEM disciplines, learning strategies used by leaders, and becoming aware of issues related to advancement of individuals in academic disciplines and advancement of entire academic units.

## Recruiting to Expand Applicant Pools (REAP)

REAP was created by the College of Engineering as a competitive program to which departments could apply for implementation of novel and active recruitment approaches. Three awards were made. Two of these awards went to a department seeking to fill two positions. The department head and two senior male faculty members used funds to visit six other campuses and attend professional conferences to actively recruit women candidates. As part of these visits, the department head and senior faculty members held informational sessions. At the professional meetings, the department head held individual meetings with interested candidates, and invited promising individuals to apply. The also used funds to purchase advertising in print journals and on the web, such as the website of a non-profit organization devoted to improving engineering education in the department's discipline and on the WELI (women's engineering leadership institute) email discussion board.
The last search conducted by the department in the 1999-2000 academic year attracted 48 applicants, of whom 6 were women. That search did not result in anyone being hired. By contrast, the searches in 2004-2005 resulted in more than 200 applicants, of whom 13 were women. The larger numbers of total and women applicants can be attributed to the more extensive advertising and personal contacts made by the department head and senior faculty members. Two women faculty members were hired as a result of this search.
The third award went to another department which used its funds to visit another university. The department head and a senior faculty member met with graduate and postdoctoral students to discuss the faculty openings at K-State. As a
result of this visit, two women applicants were interviewed, one was hired and an offer has been made to the other woman applicant.

## Parallel Paths Program

All CVM faculty (tenured, tenure-track, and term) are eligible to participate in Parallel Paths. The Parallel Paths initiative involves groups of CVM faculty known as Prides. Pride groups consist of three senior faculty facilitators and between four and seven junior faculty members who meet monthly to focus on achieving success on paths that are parallel but specific for each faculty member. A call for volunteers to participate in Parallel Paths was initiated in the spring of 2004, and a total of 19 individuals enrolled in the program.

To evaluate this initiative, OEIE prepared and administered two versions of a similar online survey: one for Pride members, and another for CVM faculty who are not involved in the Parallel Paths initiative. OEIE evaluators also conducted a focus group with members of one Pride, the High Plains Drifters.

## CVM Survey Results

The online survey addressed the questions of how CVM faculty perceived their work environment and whether faculty involved in Parallel Paths perceived the environment differently from those who were not involved in Parallel Paths. The response rate was $43.1 \%$ for CVM faculty not involved in Parallel Paths and was $68.4 \%$ for Pride members.

There were ten statements about working in the CVM to which respondents indicated their level of agreement. In general Pride members agreed more strongly with the statements than did non-Pride faculty. The differences were not significant except for the statement "Working in the CVM provides access to the necessary professional resources in my discipline" ( $\mathrm{F}=6.79, \mathrm{p}<.05$ ).

All respondents were asked to identify three benefits and three challenges of being a faculty member in their departments, with the responses being disaggregated by Pride membership status and categorized. The benefits of being a faculty member in a CVM department were described similarly regardless of Pride membership status, with collegiality being listed most frequently. Similarly, non-Pride faculty members most frequently indicated that they enjoyed working in a supportive atmosphere. Further, members of both groups cited strong administrators as the second highest ranking benefit of working within the CVM

The three most common challenges of being a CVM faculty member, as perceived by Pride members, were a lack of collegiality, inadequate funding and resources, and difficulties with administration. Non-Pride faculty members identified the same three major challenges. However, these respondents felt that administration difficulties were the biggest challenge, followed by funding and collegiality issues.

For the most part, it appears that Pride participants and non-Pride faculty members perceive similar benefits and challenges associated with their work environment. Interestingly, some top categories described as "benefits" were the same categories described as "challenges" (e.g., collegiality).

To determine the extent to which Parallel Paths participants felt that the program was achieving its stated goals, participants indicted their level of agreement with ten items that described possible outcomes of Pride membership. The statements receiving the highest agreement ratings were "Participation in a Pride promotes collegiality." and "Participation in a Pride promotes cross-departmental dialogue among colleagues." Overall, the high level of agreement to the statements suggests that Pride participants perceive Parallel Paths as meetings its goals and objectives.

They also were asked to answer open-ended questions about the benefits and challenges associated with participating in a Pride, provide suggestions to improve the program, and describe what they hoped to gain from their participation. Collegiality emerged as the leading benefit of participating in a Pride. Respondents indicated that they enjoyed discussions with colleagues and obtaining constructive feedback from other Pride participants. On the other hand, group dynamics and time commitments emerged as the leading challenges associated with Pride participation. Suggestions for improving the program included finding ways to improve meeting attendance, creating smaller groups to improve the quality of discussions, finding ways to encourage new and marginalized group members to speak, and initiating a selection process for assigning members to participate in the groups. Pride members who participate in Parallel Paths want to help their college or department by strengthening the department or college, improving faculty retention, and improving faculty communication.

In general, the work environment survey results suggest that the College of Veterinary Medicine provides a hospitable working environment for faculty. This is true regardless of whether faculty participate in the Parallel Paths initiative. Further, some faculty find that the work environment is collegial and feel that a strong administration contributes to the
positive environment. On the other hand, some respondents felt that challenges associated with working in the CVM included an environment that is not collegial and an administration that is not supportive of faculty efforts.

Pride members are generally pleased with their participation in the Parallel Paths initiative. They are especially happy with the collegial atmosphere of the program, however, they feel that group dynamics are problematic and provided suggestions to address this particular challenge. For the most part, they feel that participating in the program can improve departmental communication and are pleased with the opportunity to participate because it may improve their department and college.

## Focus Group Results

The focus group discussion was consistent with the responses provided on the work environment survey. In particular, members of the High Plains Drifters identified similar benefits and challenges of Pride participation as those reported in late 2004. Members of this group noted that some early challenges associated with group dynamics had been addressed.

## Outreach Activities:

We have created a listserve that reaches all SEM faculty at K-State. This will be used to communicate information about project initiatives and to publicize noteworthy national stories on women in SEM.

We also provide posters for all ADVANCE Distinguished Lecture Series events to all SEM departments to publicize these widely. We have created brochures describing all project activities and summarizing outcomes of project initiatives and a poster display that will be placed in each partner college on a rotating basis.
Dr. Cynthia Burack of Ohio State University presented a lecture in the Vice Provost for Academic Services and Technology Emerging Technology series entitled, 'Who are we? Professional identity and resistance to diversity', during her visit to campus in October 2004.

Dr. Geri Richmond of the University of Oregon presented the King Lecture in the Department of Chemistry entitled 'Water structure and bonding at hydrophobic surfaces' during her visit to campus in October 2004. She also attended a luncheon with women undergraduates and graduate students organized by the Women in Engineering and Science Program in conjunction with the ADVANCE Project and the Department of Chemistry.

## Journal Publications

B. A. Montelone and R. A. Dyer, "ADVANCE Institutional Transformation at Kansas State University", 2004 WEPAN National Conference Proceedings, p. N/A, vol. N/A, (2004). Published

Ruth A. Dyer and Beth A. Montelone, "ADVANCE Distinguished Lecture Series", 2005 WEPAN/NAMEPA National Conference Proceedings, p. N/A, vol. N/A, (2005). Published

## Data or databases

## Product Description:

We are in the process of collecting the baseline data (1997) for the NSF ADVANCE indicators. We have previously collected data for years one and two of our award (2003 and 2004).

## Sharing Information:

These data are available via a link from our ADVANCE project website and have been and will continue to be shared at the NSF ADVANCE PIs meetings and at other appropriate meetings, retreats, and conferences.

## Product Type:

## Instruments or equipment developed

Product Description:
We have developed several assessment, reporting, and career planning instruments that are used to collect data for the NSF Indicators and in conjunction with several of our department-level, college-level, and project-level initiatives. These instruments include pre- and post-workshop surveys of faculty attitudes and knowledge for our Equity Action Workshops, the Start-up Package template, the Space Analysis Data Template, the Career MAPS Template, and the Website Review Rubric. These instruments are available on our ADVANCE Project website.

## Sharing Information:

These instruments are being shared with other researchers involved in gender equity studies and can serve as models for others to use as they create and assess similar programs.

